REMARKS

This Amendment is submitted in response to the Office Action dated March 20, 2007, having a shortened statutory period set to expire June 20, 2007.

CLAIM AMENDMENTS

In the present Amendment, Applicant has proposed amendments to incorporate certain of the dependent claims into the underlying independent claims and to cancel all remaining dependent claims. Because the proposed amendments do not raise any new issues and necessarily reduce the number of outstanding issues, Applicant respectfully submits that the proposed amendments are proper and respectfully requests their entry.

CLAIM REJECTIONS UNDER 35 U.S.C. § 101

In paragraph 17 of the present Office Action, Claims 6-11 and 33-44 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. That rejection is respectfully traversed.

In paragraph 17.1, the Examiner, with reference to Claims 31-44, states:

> In this instance, absent an explicit and deliberate definition in the specification that the product includes an appropriate medium or hardware elements, the claims are directed to software, *per se*. Note exemplary Claim 31 which recites only software elements.

In response, Applicant respectfully points out that independent Claims 31, 36 and 42 all explicitly recite "a tangible computer usable medium" in the body of the claim following the transitional phrase "comprising" (see, e.g., MPEP 2111.03 for a discussion of transitional phrases). Applicant is therefore puzzled why the Examiner has not attributed patentable weight to the explicitly recited "tangible computer readable medium" and believes that no "appropriate medium" is recited in Claims 31-44. Because the Examiner's position is clearly in error, Applicant respectfully submits that the rejection of Claims 31-44 under 35 U.S.C. § 101 is not well founded and should be withdrawn.

In paragraph 17.2, the Examiner states that Claims 6-11 "do not produce a useful, tangible and concrete final result." Applicant again respectfully traverses the Examiner's position because Claim 6 recites "placing the simulation model in data storage," which provides a useful, tangible, and concrete result, namely, a simulation model for an electronic design residing in data storage. Applicant again is puzzled why the Examiner states that the claims "merely recite a software algorithm, per se, which, for example, does not display, store, or otherwise provide a useful tangible output" (emphasis supplied) when Claim 6 explicitly recites a step of "placing the simulation model in data storage". Placing the simulation model in data storage as claimed is clearly a "storing" step, which the Examiner admits provides a useful tangible output, namely, data storage having its contents arranged to provide a simulation model of an electronic design. Because the Examiner admits that storing an output as claimed provides a useful, tangible result, Applicant respectfully submits that the rejection of Claims 6-11 under 35 U.S.C. § 101 is not well founded and should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. § 112, 2nd PARAGRAPH

In paragraph 18 of the present Office Action, Claims 1-14, 16-29 and 31-44 are rejected under 35 U.S.C. 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. That rejection is respectfully traversed.

In paragraph 19, the Examiner states:

> The "term 'any storage elements' fails to specifically set the metes and bounds of the claim; thus, rendering the claim indefinite. This statement creates ambiguity that requires clarification. Specifically, does the phrase mean the inclusion of optional storage devices if any are needed, or does it refer to any type of storage element?

Applicant respectfully traverses the Examiner's position because the phrase "any storage elements" is not indefinite in that it clearly means the storage elements (e.g., latches, flip-flops, etc.), if any, that are present within the design entities of the electronic design. Furthermore, even if the Examiner were to adopt the supposed alternative interpretation of "any type of storage elements", the meaning would be one and the same. That is, the statements in the HDL

files would still specify any types of storage elements (e.g., latches, flip-flops, etc.) that define function operation of the electronic design. Moreover, Applicant respectfully reminds the Examiner that, according to MPEP 2173.02, the Examiner "should allow claims which define the patentable subject matter with a reasonable degree of particularity and distinctness. Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire." Because the present claims satisfy the requirement of a reasonable degree of precision, Applicant respectfully submits that the rejection under 35 U.S.C. § 112, second paragraph, is not well founded and should be withdrawn.

In paragraph 20 of the present Office Action, the Examiner further rejects exemplary Claim 1 for reciting "storing said one or more HDL files" because the Examiner believes that this features "lacks antecedent basis for the HDL files when the optional steps are not performed." In response, Applicant traverses the Examiner's claim interpretation that the steps preceding the storing step are optional because Claim 1 affirmatively recites the "permitting" steps as non-optional steps. More importantly, the Examiner is applying the wrong test for antecedent basis. In MPEP 2173.05(e), it is clear that indefiniteness for lack of antecedent basis arises in cases in which a noun first appears in a claim with the definite article "the" because such a reference leads to a lack of clarity. In contrast to the simple grammatical test set forth in the MPEP, the Examiner attempts to construct a test that makes the antecedent basis of a term dependent upon the ordering in which steps of a method claim are performed. However, such a test does not comport with the examination practice set forth in the MPEP.

When the proper grammatical test for antecedent basis is employed, it is readily apparent that the term "the HDL files" rejected by the Examiner is preceded by two previous recitations of "one or more HDL files," which provide the requisite antecedent reference. Consequently, Applicant respectfully submits that the rejection of Claim 1 under 35 U.S.C. § 112, second paragraph, as indefinite is not well founded and should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. § 103

In paragraph 23 of the present Office Action, Claims 1-14, 16-29 and 31-44 are rejected under 35 U.S.C. 103(a) as unpatentable over the combination of U.S. Patent No. 5,604,895 to *Raimi* and U.S. Patent No. 4,821,178 to *Levin*. That rejection is respectfully traversed, and favorable reconsideration of the claims is respectfully requested.

Applicant respectfully submits that exemplary Claim 1 is not rendered unpatentable by the combination of cited references because that combination does not disclose, teach or suggest each claimed feature. For example, the combination of *Raimi* and *Levin* does not disclose, teach or suggest the following step of exemplary Claim 1 as amended:

> permitting a user to specify ... an instrumentation entity that monitors at least one design entity ... but does not contribute to functional operation of the electronic design, wherein specifying the instrumentation entity includes specifying a trace array within the instrumentation entity ..., <u>wherein specifying a trace array includes specifying an association between an enumerated value and a value of the at least one signal comprising said monitored signal set</u>. (emphasis supplied)

With respect to the above step of exemplary Claim 1, which includes the features formerly recited in canceled dependent Claim 3, page 6 of the present Office Action generally cites the code example given at col. 10, line 42 through col. 11, line 11 of *Raimi* without any explanation of which line(s) of code are supposed to disclose the claimed association of an enumerated value with a signal value. Applicant has carefully reviewed the code example and the associated description provided by *Raimi* at col. 11, line 13 through col. 12, line 8 and notes that no such association between an enumerated vale and a signal value is disclosed therein. Because the combination of *Raimi* and *Levin* does not disclose, teach or suggest each claimed feature, Applicant respectfully submits that the rejection of exemplary Claim 1 as unpatentable under 35 U.S.C. § 103 is overcome.
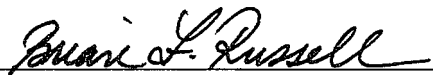
The foregoing remarks made with respect to exemplary Claim 1 also overcome the rejections of independent Claims 6, 12, 16, 21, 27, 31, 36 and 42.

CONCLUSION

Having now responded to each objection and rejection set forth in the present Office Action, Applicant believes all pending claims are now in condition for allowance and respectfully requests such allowance.

No additional fee is believed to be required. If, however, any additional fees are required, please charge those fees to IBM Corporation Deposit Account No. **09-0447**.

Respectfully submitted,

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